Evaluation of Wildland Fire Chemicals

STANDARD TEST PROCEDURES

Biodegradability

Summary: Organic compounds such as those found in Class A Foams and Water Enhancers are frequently very stable. To help protect the environments in which they are used, some means to assess their relative stability is needed. Natural processes such as biodegradation and photodegradation may break down these products in natural environments.

This procedure covers the biodegradation test that uses non-acclimated bacteria as this would be the likely situation in the case of an application in the wildland.

A sample of the product that was submitted to the Forest Service for qualification testing is sent to an approved testing lab. Results are sent back to the Forest Service.

The Project Leader for Fire Chemicals compiles the results and prepares a letter to the supplier showing the performance of the submitted product. A copy of the lab report is also provided to the supplier.

Method:

1. All testing shall be performed in accordance with protocols of the U.S. Environmental Protection Agency (EPA), Office of Prevention, Pesticides, and Toxic Substances (OPPTS).
2. Laboratories performing the testing shall comply with the EPA established Good Laboratory Practices.

References:

U.S. Environmental Protection Agency, Office of Prevention, Pesticides, and Toxic Substances. Ready Biodegradability; 835.3110(m), Carbon Dioxide Evolution Test.

Organization for Economic Cooperation and Development. Ready Biodegradability; 301B, CO_2 Evolution (Modified Sturm Test).

U.S. Environmental Protection Agency, Federal Insecticide, Fungicide, and Rodenticide Act. Good Laboratory Practices; 40 CFR 160

U.S. Environmental Protection Agency, Toxic Substances Control Act. Good Laboratory Practices, 40 CFR 792